

THE WHO GLOBAL TASK FORCE ON TB IMPACT MEASUREMENT

MAY 2022



WHO ARE WE?

In June 2006, the Global TB Programme (GTB) in the World Health Organization (WHO) established a Global **Task Force** on TB Impact Measurement, with the TB monitoring, evaluation and strategic information (TME) unit in GTB acting as the secretariat.

The **Task Force** includes a wide range of experts in TB epidemiology, statistics and modelling, representatives from major technical and financial partners and representatives from countries with a high burden of TB. There have been seven full Task Force meetings since its inception and many other meetings on specific topics.

The initial aim of the **Task Force** was to ensure that WHO's assessment of whether the 2015 global TB targets were achieved was rigorous, robust and consensus-based. Following publication of this assessment in the 2015 Global TB Report and in the context of The End TB Strategy (2016-2035) and the Sustainable Development Goals (2016-2030), the **Task Force** reviewed and updated its mission and strategic areas of work for the post-2015 era.

THE END TB STRATEGY

TARGETS*

2030[†] 2035

Reduction in the number of TB deaths compared with 2015 (%)

90% 95%

Reduction in TB incidence rate compared with 2015 (%)

80% 90%

TB-affected households facing catastrophic costs due to TB (%)

0% 0%

WHAT IS OUR MISSION?

In the context of the End TB Strategy and the Sustainable Development Goals (SDGs), the **Task Force's** mission is:

1. To ensure that assessments of progress towards End TB Strategy and SDG targets and milestones at global, regional and country levels are rigorous, robust and consensus-based.
2. To guide, promote and support the analysis and use of TB surveillance and survey data for policy, planning and programmatic action.

The 2020 milestones of the End TB strategy were a 35% reduction in TB deaths and a 20% reduction in the TB incidence rate compared with levels in 2015, and that no TB patients and their households face catastrophic costs as a result of TB disease. The 2025 milestones are a 75% reduction in TB deaths and a 50% reduction in TB incidence.

The first United Nations high-level meeting (UNHLM) on TB in 2018 set additional targets to treat 40 million people with TB disease and at least 30 million people with TB infection between 2018 and 2022.

* Milestones were defined for 2020 and 2025.

† Targets linked to the Sustainable Development Goals. SDG target 3.3 is to end the TB epidemic by 2030.

Progress made towards the End TB Strategy milestones and the two UNHLM targets for treatment enrolment by the end of 2020

TB incidence



TB deaths



TB patients not facing catastrophic costs



TB treatment



TB preventive treatment



CURRENT STRATEGIC AREAS OF WORK

1. Strengthening surveillance

- National systems for TB surveillance, for direct measurement of TB incidence
- National vital registration (VR) systems, for direct measurement of the number of deaths caused by TB

2. Priority studies to periodically measure TB disease burden

These include (but are not limited to):

- National TB prevalence surveys
- Drug resistance surveys
- Surveys of costs faced by TB patients and their households

3. Periodic review of methods used by WHO to produce estimates of the burden of TB disease

4. Analysis and use of TB surveillance and survey data at country level

The strategic areas of work will be reviewed and updated if necessary at the next meeting of the full Task Force (likely in 2023).

1: STRENGTHENING SURVEILLANCE

Priority areas of work identified by the **Task Force** are:

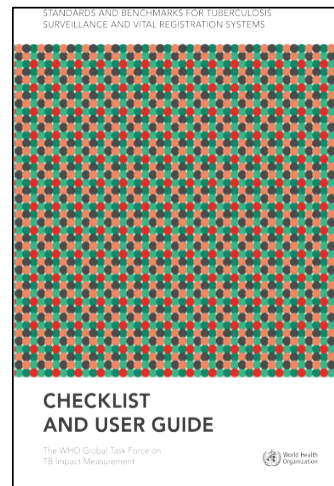
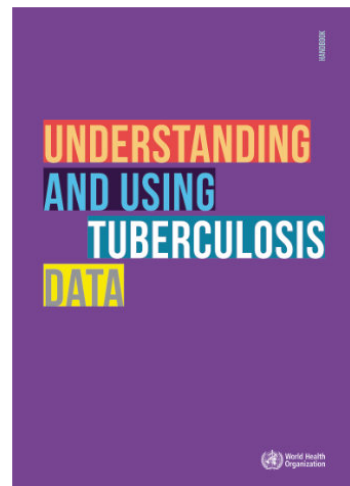
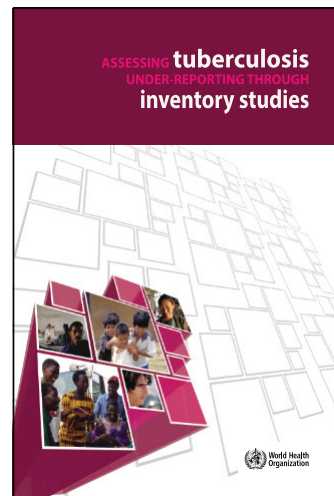
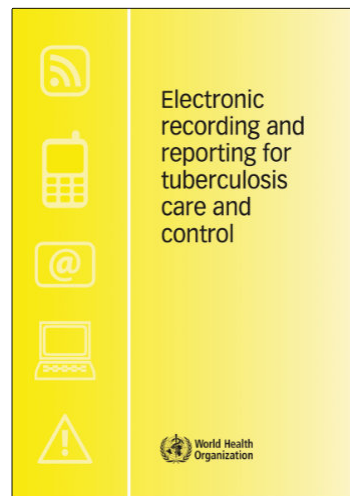
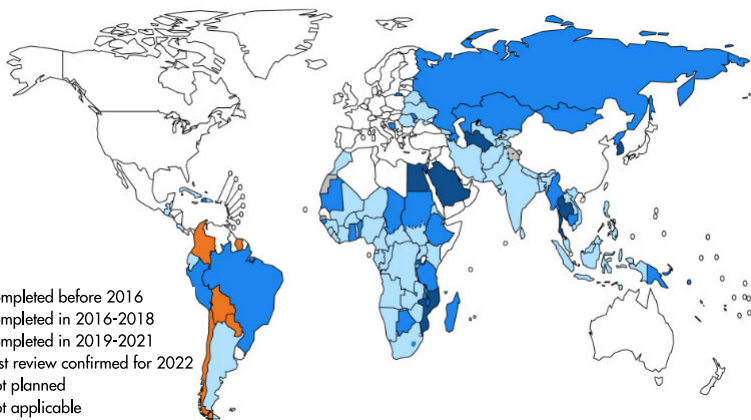
Strengthening national systems for TB surveillance, for direct measurement of TB incidence

1. TB epidemiological reviews, including use of the WHO TB surveillance checklist.
2. Regional analysis workshops.
3. Transitioning from paper to digital case-based surveillance.
4. TB inventory studies to measure under-reporting of detected TB cases.

Strengthening national vital registration (VR) systems, for direct measurement of the number of deaths caused by TB

1. Promoting use of VR data for measurement of TB mortality.
2. Creating and sustaining links with relevant stakeholders.
3. Mortality studies to validate VR data.

Between January 2013 and May 2022, **91** countries completed the TB **surveillance checklist** and a national TB **epidemiological review** ([map](#)); results and lessons learned from reviews up to April 2020 have been synthesized. A second edition of the WHO TB surveillance checklist is in development.



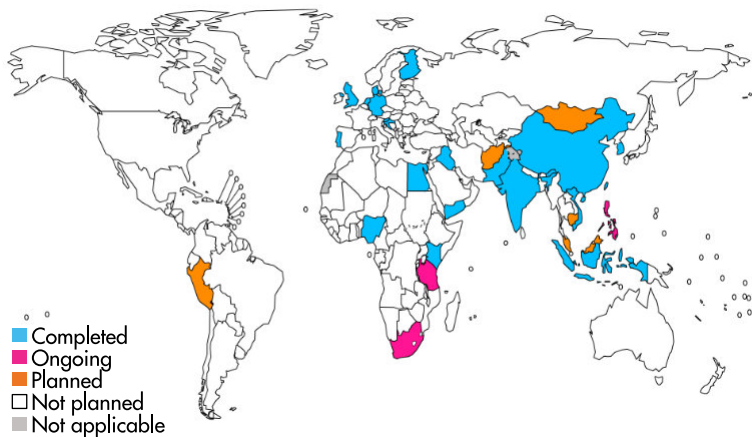
1: STRENGTHENING SURVEILLANCE

INVENTORY STUDIES TO MEASURE UNDER-REPORTING OF DETECTED TB CASES

Estimates of TB incidence rely on the systematic analysis of case notification and programmatic data combined with assessment of the number of cases not reported and not diagnosed. The [Assessing tuberculosis under-reporting through inventory studies](#) guide, published in 2012, describes and explains how to design, implement and analyse inventory studies to measure the under-reporting of detected TB cases.

Inventory studies are being promoted in selected countries, linked to recommendations following national TB epidemiological reviews and use of the TB surveillance checklist. They are of particular relevance in countries with large private sectors or where large numbers of TB patients are thought to be treated in the public sector but not reported to national authorities.

By May 2021, an inventory study had been completed in 19 countries. Inventory studies have started in the Philippines, South Africa and United Republic of Tanzania and are planned in Afghanistan, Cambodia, Malaysia, Mongolia and Peru (map).



GLOBAL TUBERCULOSIS REPORT

2021

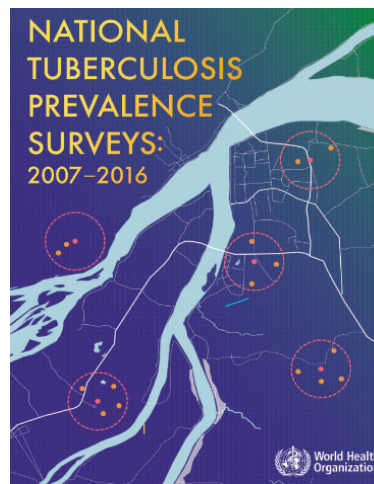
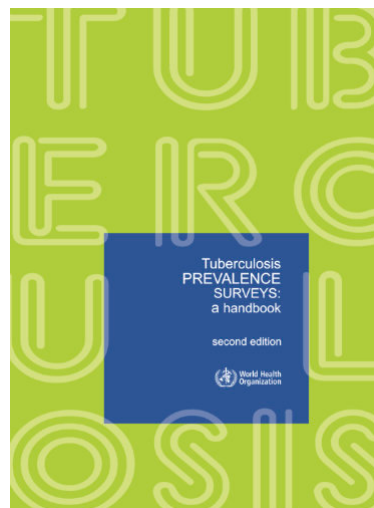
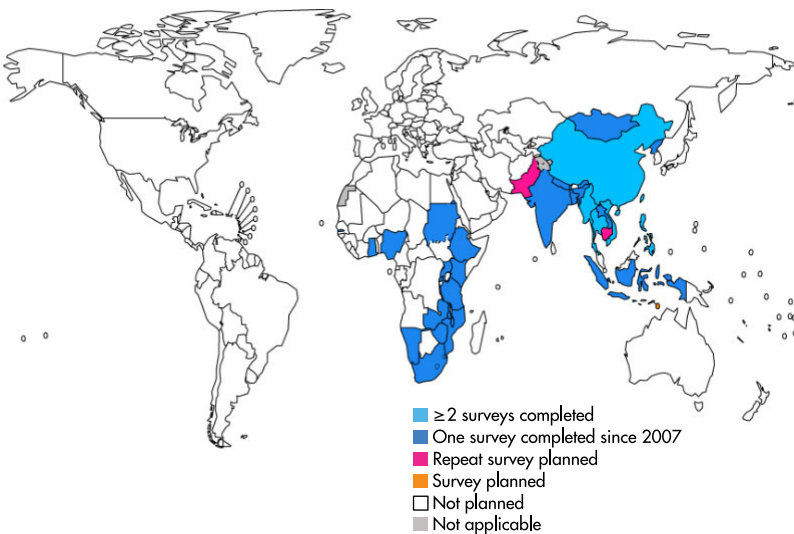
2: PRIORITY STUDIES TO MEASURE TB DISEASE BURDEN

A. NATIONAL TB PREVALENCE SURVEYS

Between 2007 and 2021, 34 national surveys of the prevalence of TB disease were implemented in 31 countries (map), following guidance in the [Tuberculosis prevalence surveys handbook](#) (2nd ed: the “lime book”) developed by the Task Force. India completed a survey in 2021. Cambodia and Pakistan are planning a repeat survey, and Timor-Leste is planning a first survey.

In 2021, WHO published a book that provides a global synthesis of results and lessons learned from surveys implemented 2007-2016; this was developed as a collaborative effort of 24 countries and their technical partners, with contributions from more than 450 people.

A 3rd edition of the WHO handbook on TB prevalence surveys is in development.



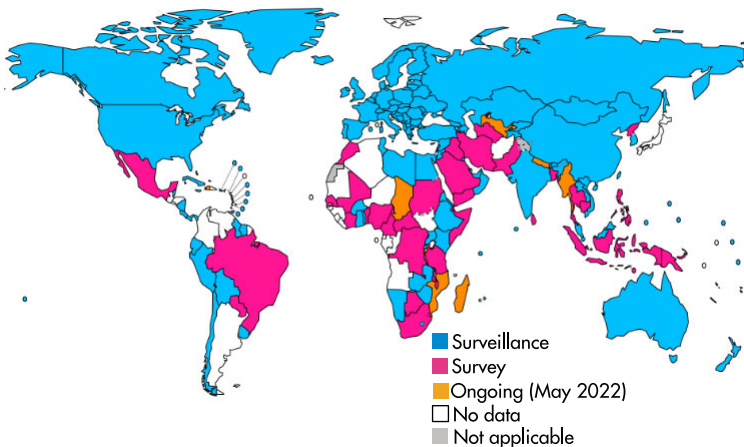
2: PRIORITY STUDIES TO MEASURE TB DISEASE BURDEN

B. SURVEYS OF ANTI-TB DRUG RESISTANCE

The Global Project on Anti-TB Drug Resistance Surveillance was launched in 1994. Its aims are to estimate the magnitude of drug resistance among TB patients and determine trends over time. Approaches to surveillance are described and explained in the [Guidance for the surveillance of drug resistance in tuberculosis \(6th ed: 2021\)](#).

In 2020, **one** country (Zambia) completed a drug resistance survey and **three** more will be completed in the second half of 2022 (Burundi, Mozambique, Myanmar, Niger). By May 2022, **136** WHO Member States had continuous national surveillance systems based on routine drug susceptibility testing of TB patients and **38** countries relied on nationally (or sub-nationally) representative surveys.

Overall, **63** countries have implemented at least one nationally representative survey since 2007. In May 2021, **10** countries were planning or implementing a survey ([map](#)).



The graphic features a central dark blue circle with the title "Guidance for the surveillance of drug resistance in tuberculosis" and "Sixth edition" in white text. The background is a dark purple field with various colorful icons representing medical and public health concepts: hands, DNA, lungs, pills, test tubes, a microscope, a stethoscope, a person, a globe, a group of people, and a circular diagram. The World Health Organization logo and name are positioned at the bottom left of the graphic.

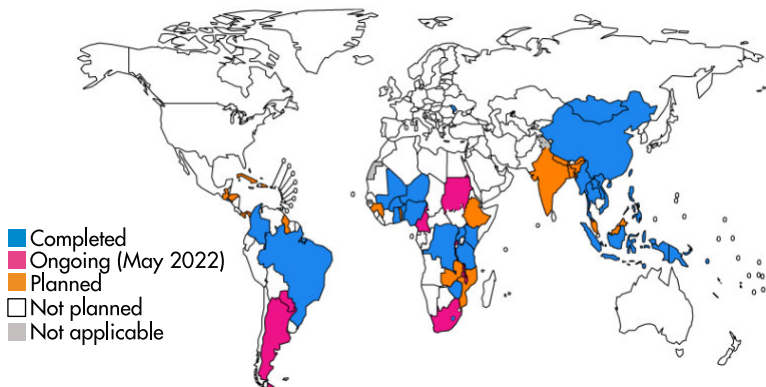
2: PRIORITY STUDIES TO MEASURE TB DISEASE BURDEN

C. TB PATIENT & HOUSEHOLD COST SURVEYS

A [handbook](#) to support countries to conduct nationally representative surveys of **costs faced by TB patients and their households**, and to assess whether these costs are catastrophic, was published by WHO in 2017.

In May 2022, **27** countries had completed a survey: **Benin, Brazil, Burkina Faso, China, Colombia, Democratic Republic of the Congo, El Salvador, Fiji, Ghana, Indonesia, Kenya, Lao People's Democratic Republic, Lesotho, Mali, Mongolia, Myanmar, Nigeria, Papua New Guinea, Philippines, Republic of Moldova, Solomon Islands, Thailand, Timor-Leste, Uganda, United Republic of Tanzania, Viet Nam and Zimbabwe**). **Eight** other surveys are ongoing and **15** are planned ([map](#)).

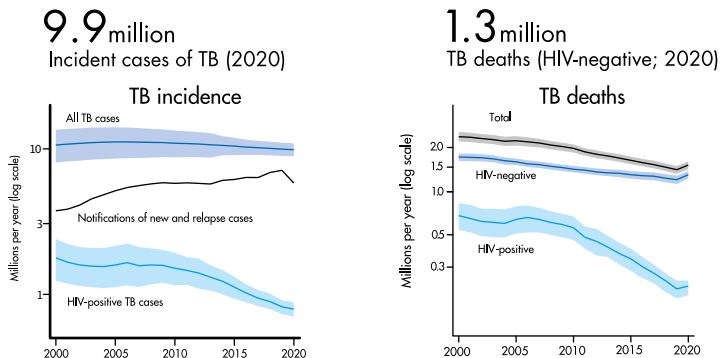
The surveys inform policy discussions on how to improve TB services and their financing, and how to advance universal health coverage and enhance social protection, with the overall aim of eliminating catastrophic costs due to TB disease. A book that will provide a global synthesis of results and lessons learned from surveys implemented 2015-2021 will be published in 2022.



TUBERCULOSIS PATIENT COST SURVEYS: A HANDBOOK

3: METHODS TO ESTIMATE TB DISEASE BURDEN

Methods used by WHO to translate surveillance and survey data into estimates of TB incidence and mortality need to be periodically reviewed. The latest methods are documented in WHO's [Global Tuberculosis Report \(2021\)](#).



The first milestones of the End TB Strategy, set for 2020, were a **35%** reduction in the absolute number of TB deaths and a **20%** reduction in the TB incidence rate, compared with levels in 2015.

Globally between 2015 and 2020, the number of TB deaths fell **9.2%** and the TB incidence rate declined by **11%**; **the world did not achieve the 2020 milestones**.

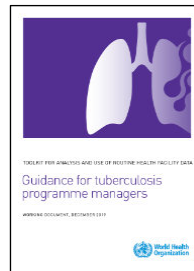
By the end of 2020, 6 high TB burden and 3 global TB watchlist countries were assessed to have reached the 2020 milestone for TB incidence: **Cambodia***, **Ethiopia**, **Kenya**, **Myanmar**, **Namibia**, **Russian Federation***, **South Africa**, **United Republic of Tanzania** and **Zimbabwe***. The WHO **European region** also did so in 2020.

By the end of 2020, 6 high TB burden and 1 global TB watchlist country were assessed to have reached the 2020 milestone for TB deaths: **Kenya**, **Mozambique**, **Myanmar**, **Russian Federation***, **Sierra Leone**, **United Republic of Tanzania** and **Viet Nam**. No WHO regions met the milestone.

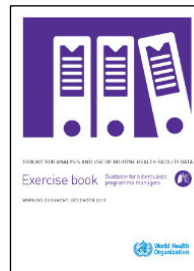
*global watchlist country

4: ANALYSIS AND USE OF DATA AT COUNTRY LEVEL

[Understanding and using tuberculosis data](#) is a handbook that provides advice on analysis of TB-relevant data, especially surveillance data from national notification and vital registration systems, and data from periodic surveys.



A comprehensive **WHO digital package** is available to support countries with the transition from paper-based aggregated to digital case-based TB surveillance and the routine analysis and use of TB data for action. The package includes **DHIS2 TB modules (metadata and analytical dashboards)** for aggregated and case-based TB data, as well as a **curriculum, comprising** a guidance document and exercise book on the use and interpretation of data. Training materials are being translated into an e-learning format in collaboration with the WHO academy.



The WHO digital **package for TB** was developed alongside packages for other disease programmes (e.g. HIV, malaria, immunization).

By May 2022, the **WHO digital module** for aggregated TB data had been installed in 25 countries and a further 20 had expressed interest. The case-based digital module for TB is being piloted in 5 countries. More than 65 countries have stored historical national and subnational TB surveillance data in a DHIS2 platform (tbhistoric.org) developed by WHO.



Guidance on country-level TB modelling was published in 2017. For further information about TB modelling, please visit tb-mac.org.

MAJOR PARTNERS

NATIONAL TB PROGRAMMES OF MANY COUNTRIES



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WHO/UCN/TB/2022.3

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